REMARKS/ARGUMENTS

Claims 1-9, 11-24, 29, 31-37, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 are currently pending. Claims 1, 12, 13, 22, 29, 54, 163, and 176-178 have been amended for clarification. Support for this amendment can be shown from page 10, paragraph 4 of the PCT published document to page 11, second paragraph which describes the hysteresis offset which is used to modify the measured strength of the communication from the current cell at the station, the offset being dependent on the current cell being the current cell of the station. It is respectfully submitted that no new matter has been added.

35 U.S.C. § 103(a)

Claims 1-3, 7-22, 29, 33, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Charbonnier, U.S. Patent No. 5,241,686, in view of D'Amico, U.S. Patent No. 5,127,100.

Claims 4-6, 23, 24, 31, 32, 35-37, 70-72, 83-85, 96-98, 111-113, 127-129, and 144-146 stand rejected under 35 U.S.C. §103 as unpatentable over Charbonnier, in view of D'Amico, U.S. Patent No. 5,127,100, and further in view of Karlsson, U.S. Patent No. 5,640,677.

Claims 165 and 166 were rejected under 35 U.S.C. §103(a) as being unpatentable over Charbonnier, U.S. Patent No. 5,241,686, in view of D'Amico, U.S. Patent No. 5,127,100, as applied to claim 1 above, and further in view of Jones, U.S. Patent No. 6,192,245.

Applicant's response of June 13 2008, from page 12, line 20, through page 15, line 2, is herein incorporated by reference.

The claims have been amended to more clearly recite the novel feature of modifying the measured strength of the communication from the current cell by a current cell outset value, the current cell offset value being dependent on the offset information. A hysteresis offset may be used to modify the measured strength of the communication from the current cell at the station, the offset being dependent on the current cell being the current cell of the station. In other words, applying an offset to the current cell received signal strength from the currently active call base station because it is the current action cell in order to reduce the amount of "ping-pong" selection activity which could occur at boundaries of cells.

It is respectfully submitted that the further clarification of the claims overcomes the Patent Office's objection.

As discussed previously and at length, Charbonnier (US-5241686) discloses a method for optimising the distribution of the radio electric load on a radio communication cellular network at fixed intervals. Charbonnier discloses in column 6 that a synthesizer is positioned successively and cyclically on each frequency (for radio channels used as a beacon route, i.e. base station frequencies). Then for each frequency, the output signal from the modem is analysed to determine if it is a valid beacon route, i.e. is a valid base station, and possibly read the characteristic data of the relay amongst which the value of the field correction parameter (H) for the base station is determined. At this point the field strength or power (E) of the electric field for the beacon route may also be measured. The unit may then compute the difference between the power of the received field and field correction parameter and stores the corrected field value in memory. Thus all of the base stations have a field correction value applied associated with the available capacity of the base station in question.

It is only when the mobile has scanned the entire set of beacon routes listed in the table of frequencies, including the beacon route of the channel in which it is currently located, that the route compares the values of the corrected field and determines the beacon route having the highest corrected value.

Thus Charbonnier, as determined by the Patent Office, does not disclose the feature of measuring the time for which the measured strength of the communication from the at least one cell exceeds the measured strength of the communication from the current cell, at least one of the measured strengths having been modified in a modified step.

Thus claim 1 is novel over Charbonnier.

As discussed above the beacon signal of the cell is corrected by a correction parameter value, which is the offset value. Although all of the cell/beacons have offset values dependent on the current capacity of the cell, there is no disclosure of a specific current cell offset value.

Charbonnier applies an offset to each cell and does not favour or indicate bias whether or not the beacon is currently in use by the given mobile unit.

Therefore the claim is furthermore novel over Charbonnier as the present application recites a current cell offset value linked, i.e. an offset associated with the cell being the current cell and other further offset values which are applied to non-current cell signals.

As indicated previously, there would be an advantage in the embodiments of the present application over the prior art in that for the prior art systems there is no or only limited ways to

prevent the mobile jumping from cell to cell quickly as the handover would be highly dependent on the loading of the cell. Thus the loading correction factor has a harsh correction factor. It could be imagined that current cell station would jump from cell A to cell B if cell B was not considered to be heavily loaded but may attempt to immediately offload the station back to cell A and vice versa very soon after. The present invention would overcome such a problem as the offset is linked to the current cell would decrease the probability of premature offloading of the cell communication.

Thus the present invention implements a hysteresis or offset value depending on being the cell currently being used "the current cell" and therefore effectively biases the decision to the current cell to prevent such rapid handover processes from having to occur unless absolutely necessary.

The Patent Office has furthermore cited D'Amico (US-5127100) and notes that it does not explicitly teach a timer. Furthermore even if the documents were to be combined there would be no disclosure of at least one of the novel features as discussed above as there is no current cell hysteresis value.

Karlsson shows a threshold is used for comparisons with serving and neighbor signal strengths (e.g., 132, 127 of Figure 11). Karlsson also discloses a signal quality increment called either an offset or hysteresis (column 2, lines 35-36) in contrast to Applicant's claimed invention in which offset and a further offset refer to different values. Karlsson discloses a threshold such as in column 13, lines 56-60, as follows: "If, however, at 127, it has been determined that the signal strength for the neighboring cell was greater than the threshold value, the system moves to add this neighbor's cell to the candidate list at 129 and thereafter to decision 128 to evaluate whether or not the last neighbor has been evaluated;" i.e., **the threshold value of Karlsson is not equivalent or similar to the current cell offset of Applicant's claimed invention because as is clear in, e.g., Figure 10, the threshold is measured against signal strength and is not used to modify the value of the signal strength**. There is disclosure of adding inaccuracies in the mobile station (column 7, lines 24-26 and 57-59) but the disclosed inaccuracies in the mobile station are not obtained from decoding and so do not teach or suggest "decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information." Karlsson discloses (column 11, lines 50-54) "Another way to provide the mobile the mobile with the frequencies, the neighbor types, two signal strength levels, i.e., the threshold

and the hysteresis, and another hysteresis would be to broadcast the threshold and the hysteresis separately and let the mobile calculate the two levels." The threshold disclosed in column 11, lines 50-54, of Karlsson is described in column 11, lines 11-13, as "the threshold value is the threshold of sufficient signal strength in the neighbor cell plus a corresponding hysteresis or offset value." Like Charbonnier, Karlsson considers hysteresis and offset to be the same (also see column 2, lines 35-40). In Karlsson, there is no current cell hysteresis value.

As such, Karlsson does not remedy the deficiencies of Charbonnier and D'Amico.

Jones et al discloses a method for determining a handover for a mobile station in a multi-cellular communication system having a serving cell, a plurality of neighbouring cells, and at least one control cell where the cell includes at least one macro cell and a plurality of micro cells. The document does disclose as indicated in the flow diagram of Figure 2 and the Figure 1 that the mobile station monitors measurement reports for the serving cell and neighbour cells, and that when a mobile station served by a cell 3 detects that a neighbour cell 4 is being received at a power which exceeds a threshold, it starts a timer.

Jones does not teach the modification of the measured strength of the communication from at least one of the current cell and the at least one other cell in dependence on the obtained offset information and modification of the measured strength of the communication from the current cell with a further offset value. In Jones, there is no current cell hysteresis value.

As such, Jones does not remedy the deficiencies of Charbonnier and D'Amico and/or Karlsson.

Thus, claims 1-9, 11-24, 29, 31-37, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 are allowable over the prior art of record.

In Response to Arguments in Office Action dated December 30, 2008

D'Amico does not teach both modification of the measured strength of the communication from the current cell by the **current cell** offset value in dependence on the obtained offset information and modification of the measured strength of the communication from the at least one other cell with a further offset value and "measuring a duration of time for which the measured strength of the communication from the at least one other cell exceeds the measured strength of the communication from the current cell during said comparing." Charbonnier, in combination with D'Amico, whether or not further in combination with Karlsson

or Jones, does not disclose or suggest modification of the measured strength of the communication from the current cell by a **current cell** offset value in dependence on the obtained offset information and modification of the measured strength of the communication from the at least one other cell with a further offset value where the current cell with which the station is associated is changed only if the measured the measured strength of one of the at least one other cell is greater than the measured strength of the current cell (after modification) for a duration of time that is at least a predetermined time period.

The Patent Office is respectfully requested to reconsider and remove the rejections of the claims 1-9, 11-24, 29, 31-37, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 under 35 U.S.C. 103(a) based on Charbonnier in view of D'Amico or Charbonnier in view of D'Amico and Karlsson, and to allow all of the pending claims 1-9, 11-24, 29, 31-37, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 as now presented for examination. An early notification of the allowability of claims 1-9, 11-24, 29, 31-37, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 is earnestly solicited.

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3.30.2009 — Jessica Ken

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